

C O N C O R D I A     U N I V E R S I T Y  
Faculty of Engineering and Computer Science  
Minutes of Meeting No. 87-7  
of the  
Engineering and Computer Science Faculty Council  
Friday, 20 November 1987

Present: Professors M.N.S. Swamy (Chairman); V.S. Alagar, A.E. Blach, B.B. Budkowska, T.D. Bui, T. Fancott, P.P. Fazio, D. Feldman, P. Grogono, F.D. Hamblin, J.F. Hayes, H.F. Li, Y.J. Lu, H.J. McQueen, O. Moselhi, M.O.M. Osman, R.V. Patel, E.I. Plotkin, F. Sadri, S. Sarraf, O. Schwelb, T. Stathopoulos, G.D. Xistris; Mrs. Z. Jirkovsky (Library); Student representatives S. Khoury, P. Stiles, I. Youssef (ECA); V.R. Dantu (ECSGA); P.M. Bourassa (Secretary).

Absent with apology: Professor A.J. Saber

Visitors: Drs. W.M. Jaworski, D.K. Probst, K. Thulasiraman

1. Adoption of Agenda

Motion 87-7-1      Council Unanimously adopted a motion to approve the published agenda.

2. Adoption of Minutes of Meeting 87-5

Dr. Hayes said that, in the first complete paragraph on page 2, one gets the impression that the lecture mentioned in the first sentence is part of the series arranged by CBS. It should be made clear that there are, in fact, two series of lectures, the first of which is organized by the Department of Electrical and Computer Engineering.

Motion 87-7-2      Subject to the above correction, Council approved the Minutes of meeting 87-5.

Adoption of Minutes of Meeting 87-6

It was noted that the Board of Governors no longer approves the Graduation List and that the Board of Graduate Studies should be mentioned on page 2.

Motion 87-7-3 Subject to these corrections, Council adopted a motion to approve the Minutes of meeting 87-6.

3. Chairman's Remarks

The Chairman had no announcement or comments to make and suggested that Council proceed immediately to the next item on the agenda.

4. Graduate Course Proposals

4.1 Electrical and Computer Engineering

Dr. Osman, seconded by Dr. Bui proposed that discussion of Document ECFC 87-7-1 be deferred for one week in order to allow more time for the study of its contents and inter-departmental discussion of possible amendments.

Dr. Hayes objected that the contents of Document ECFC 87-7-1 were submitted to ECGSC in May, that there has been ample time for Committee members to report on this proposal to their respective departments, and that we are now so close to the deadline for submission to the Academic Programmes Committee, The Board of Graduate Studies and Senate, that the proposed curriculum revision was likely to be delayed by one year if Council did not deal with it at the present meeting.

Dr. Osman then suggested that his proposal be modified to allow Council to proceed with the consideration of Document ECFC 87-7-1 by subdividing it into three parts:

1. Curriculum changes which are of interest to the Department of Electrical and Computer Engineering only;
2. Changes to the ENGR courses, which are likely to be of interest to all five units in the Faculty;
3. Curriculum changes which are of interest to both the Department of Computer Science and the Department of Electrical and Computer Engineering.

As the seconder, Dr. Bui agreed to this modification of the original proposal.

Dr. Swamy then said that he has examined the contents of Document ECFC 87-7-1 and could readily tell which of its proposals were likely to be contentious and which were not. Therefore, he proposed to direct the consideration of this

document by dealing with the least contentious items first and proceeding by order of increasing difficulty, without making a formal subdivision into three categories.

There was general agreement on this latest suggestion, without a formal vote being taken.

Council then proceeded to consider one by one the curriculum changes listed on page 3 of the first part of the document. Concerning ENGR 601, Dr. Fancott said that ECGSC is recommending that this course, and others such as ENGR 600 and ENGR 610, be moved to a new Topic Area entitled "Background Courses" and grouping courses for students who lack the mathematics and systems background for graduate programs in engineering. These courses would not be creditable towards the credit requirements of an M.Eng. program.

Motion  
87-7-4

The following modifications were proposed to the contents of page 3 of the first part of Doc. ECFC 87-7-1:

- THAT the courses originally designated as ENGR 601 and ENGR 604 be moved to a new Topic Area for Background Courses;
- THAT instead of deleting ENGR 601 as a prerequisite, the words "or equivalent" be added wherever that course is specified;
- THAT ENGR 601 be nonetheless deleted as prerequisite to ENGR 608 - Stochastic Processes;
- THAT COMP 361 be added as undergraduate equivalent to ENGR 604 - Numerical Methods I;
- THAT ENGR 701 - Numerical Methods II - be given a 600-level number;
- THAT the words "or equivalent" be added to the prerequisite requirements of the above course;
- THAT the designation of all courses in Topic Area E01 be changed from ENGR to ENCS, with new numbers to be given, where appropriate;
- THAT the name of Topic Area E01 be changed to "Numerical Methods".

Council gave unanimous approval to Motion 87-7-4.

- Motion 87-7-5            It was moved that the curriculum changes listed on page 3 of the first part of Doc. ECFC 87-7-1 be adopted, subject to the amendments contained in Motion 87-7-4.
- Adopted unanimously.
- Motion 87-7-6            The change of title for Topic Area E03, to Systems and Control" received unanimous approval.
- Motion 87-7-7            Council gave unanimous approval to a motion calling for the transfer of ENGR 610 from Topic Area E03 to Topic Area E00 - Background Courses, and the deletion of its prerequisite. Wherever ENGR 610 is specified as a prerequisite, the words "or equivalent" should be added.
- Motion 87-7-8            Council unanimously approved the course description change proposed for ENGR 611 in Doc. ECFC 87-7-1.
- Motion 87-7-9            Council unanimously approved a motion to add the words "or equivalent" to the prerequisites to ENGR 612 and ENGR 613, rather than deleting the prerequisite requirements, as originally proposed in Doc. ECFC 87-7-1.
- Motion 87-7-10           Council unanimously approved the change to the course description for ENGR 614 as proposed in Doc. ECFC 87-7-1.
- Motion 87-7-11           Council unanimously approved the following changes to ENGR 615:
- Move to Topic Area E01;
  - Change designation to ENCS;
  - Add "or equivalent" to prerequisite;
  - Change course description as proposed in Doc. ECFC 87-7-1.
- Motion 87-7-12           Council unanimously approved the deletion of ENGR 616 and ENGR 617 as proposed in Doc. ECFC 87-7-1.
- Motion 87-7-13           Council unanimously approved the course description changes proposed in Doc. ECFC 87-7-1 for ENGR 618 and ENGR 619.
- Motion 87-7-14           Council unanimously approved the addition of a new 600 - level course on System Reliability as described in Doc. ECFC 87-7-1.
- Motion 87-7-15           Council unanimously approved the deletion of ENGR 710, ENGR 711 and ENGR 716, as proposed in Doc. ECFC 87-7-1.

Consideration of the changes proposed on page 6 was deferred.

Motion 87-7-16 Council unanimously adopted a motion to approve the changes proposed in page 7 of Doc. ECFC 87-7-1.

Motion 87-7-17 Council unanimously adopted a motion to approve the changes proposed on pages 8 and 9 of Doc. ECFC 87-7-1.

Motion 87-7-18 Council unanimously adopted a motion to approve the changes contained in page 10 of Doc. ECFC 87-7-1.

Consideration of the proposals contained in page 11 was deferred.

Motion 87-7-19 Council unanimously adopted a motion to approve the changes proposed in page 12 of Doc. ECFC 87-7-1 subject to the following amendments:

- that the new name for ELEC 623 be "VLSI Materials Technology";
- that the proposed prerequisite to ELEC 624 be deleted.

Motion 87-7-20 Council unanimously adopted a motion to approve the changes proposed on pages 13 and 14 of Doc. ECFC 87-7-1.

Motion 87-7-21 Council unanimously adopted a motion to approve the changes proposed on pages 15 and 16 of Doc. ECFC 87-7-1.

Motion 87-7-22 Council unanimously adopted a motion to approve that list of Cognate Courses given on page 17 of Doc. ECFC 87-7-1. The title of Topic Area E71 should be changed to: Computer Science Program.

Concerning the General Recommendations on page 18, it was decided to delete the first one and to table the second one.

Council agreed to proceed with the next three items on the Agenda before discussing the content of pages 6 and 11 of Doc. ECFC 87-7-1.

#### 4.2 Computer Science Graduate Course Proposals

Council then considered the curriculum changes proposed in Doc. ECFC 87-7-2.

Motion 87-7-23 Council unanimously adopted a motion to approve the new Diploma program course described under "Motion 1" in Doc. ECFC 87-7-2.

Prior to discussing the course requirements described in Motion 2 of Doc. ECFC 87-7-2, Council turned to Doc. ECFC 87-7-7, the approval of which is essential to the application of these course requirements.

Motion 87-7-24 Council unanimously approved the motion contained in Document ECFC 87-7-7.

Motion 87-7-25 Council unanimously adopted a motion to approve the course requirements described in Motion 2 of Doc. ECFC 87-7-2, with the proviso that the words "all core courses, including" are to be struck off the second line of the second paragraph.

Motion 87-7-26 Council unanimously adopted a motion to approve the prerequisite change indicated in Motion 3a of Doc. ECFC 87-7-2.

Motion 87-7-27 Council unanimously adopted a motion to approve the additions to course descriptions indicated in Motions 4 and 5 of Doc. ECFC 87-7-2.

Motion 87-7-28 Council unanimously adopted a motion to approve the contents of Motions 6a, 6b and 6c of Doc. ECFC 87-7-2.

Motion 87-7-29 Council unanimously adopted a motion to approve the course requirements stated in Motions 7 and 8 of Doc. ECFC 87-7-2, with the stipulation that references to "undergraduate equivalent" must be deleted from the text of both paragraphs.

Motion 87-7-30 Council unanimously adopted a motion to approve the prerequisite changes contained in Motions 9a and 10 of Doc. ECFC 87-7-2.

#### 4.3 Graduate Course Proposals-Building Engineering

Motion 87-7-31 Council unanimously approved the first three items of Doc. ECFC 87-7-3 (relating to BLDG 657, BLDG 663 and p. 161), on the understanding that the words "should be" in the penultimate line will be replaced by "are".

Motion 87-7-32 After some discussion, Council unanimously adopted a motion proposing the following changes to the ENGR 600 course:

- Name to be changed to: "Elements of Engineering Mathematics;
- Transfer to E00 Topic area;
- Designation to be changed to ENCS;

- Course description to exclude what is contained in ENCS 601 and to become:  
Elements of probability theory; ordinary differential equations; Fourier series, Fourier integrals, Fourier transforms.
- Number of credits reduced to 3.

Motion 87-7-33 Council unanimously adopted a motion proposing the addition of a new course on Solar Energy Materials Science, to be included in Topic Area E07, and to be designated ENGR 666. The course description is given at the bottom of the first page of Doc. ECFC 87-7-3.

Motion 87-7-34 Council unanimously adopted a motion to approve the new courses described on pages 2 and 3 of Doc. ECFC 87-7-3.

5. Slot Course - Electrical and Computer Engineering

Motion 87-7-35 Council unanimously adopted a motion to approve the slot course described in Doc. ECFC 87-7-4.

Graduate Course Proposals - Electrical and Computer Engineering

Council then came back to the consideration of those parts of Doc. ECFC 87-7-1 which had not been dealt with earlier at this meeting.

Council considered the curriculum changes proposed on page 6 of the first part of Doc. ECFC 87-7-1.

Motion 87-7-36 There was a short discussion and a motion to table the proposal was approved by a vote of 18 in favour, 3 opposed and no abstention.

Motion 87-7-37 Council considered a motion to approve the proposals on page 11 of the first part of Doc. 87-7-1 which relate to the following courses: ELEC 650, 651, 670 and 672, with the understanding that COMP 354 should not appear as an undergraduate equivalent.

There was some discussion and the question was called.

The vote on calling the question was 12 in favour, 6 against and no abstention.

The motion was adopted by a vote of 13 in favour, 3 against and no recorded abstention.



Council then considered the balance of the proposals appearing on page 11 of the first part of Doc. 87-7-1, i.e. those relating to ELEC 671, 770, 771 and 772. (ELEC 652 is also listed on P. 11 but no change to it is proposed).

Motion 87-7-38 A motion was submitted, proposing to table these proposals. The motion was adopted by a vote of 10 in favour, 9 opposed and no recorded abstention.

Motion 87-7-39 A motion was then submitted, calling Council to meet as soon as possible within the coming week, to consider the remaining proposals on p.11 of Doc. ECFC 87-7-1, those which had just been tabled.

Motion 87-7-40 An amendment to the above motion was submitted, proposing a meeting of the joint committee of the Computer Science and Electrical and Computer Engineering before the Council meeting.

Motion 87-7-41 An amendment to the above amendment was submitted, proposing that Council should meet only if the joint committee can resolve the differences concerning the remaining courses on p. 11 of Doc. 87-7-1.

After some discussion, the question was called, and the vote was unanimously in favour of calling the question.

Motion 87-7-41 was adopted by a vote of 16 in favour, 2 opposed and 2 abstentions.

Motion 87-7-40 as amended by Motion 87-7-41 was adopted by a vote of 17 in favour, 3 opposed and 3 recorded abstentions.

Motion 87-7-39, amended by Motions 87-7-40 and 87-7-41 was adopted by a vote of 19 in favour, none opposed and 3 recorded abstentions.

Dean Swamy said that a meeting of the Joint Committee of the Computer Science and Electrical and Computer Engineering Departments is already scheduled for Monday, 23 November. It was agreed that the proposed emergency meeting of Council would take place at 2:00 p.m. on Wednesday, 25 November 1987.

#### 6. Nominations for Non-Academic Awards

The attention of Council members was drawn to the contents of Doc. ECFC 87-7-5, describing the criteria and selection procedures for Non-Academic Awards.



7. Duration of three-credit courses in Computer Science

The proposals contained in Doc. ECFC 87-7-6 were drafted by and for the Computer Science Department. In order to extend its provisions to the whole Faculty, a new Document, ECFC 87-7-8 was handed out to Council members at the meeting.

Motion  
87-7-42

Council unanimously adopted a motion to approve the first motion on Doc. ECFC 87-7-8.

Motion  
87-7-43

Council unanimously adopted a motion to approve the second motion on Doc. ECFC 87-7-8.

8. Adjournment

Motion  
87-7-44

Council unanimously adopted a motion to adjourn.